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*the European*

# **CORN BORER**

*is in*

# **YOUR FIELDS**



## **DON'T LET IT DESTROY YOUR 1943 CORN CROP**

**Circular 539**

**UNIVERSITY OF ILLINOIS - COLLEGE OF AGRICULTURE  
EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS**

*In cooperation with the Illinois Natural History Survey*

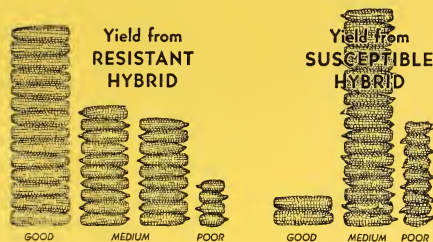
# TO PREVENT SERIOUS LOSSES

## *Follow This 3-Point Program*

### 1. Use resistant hybrids

Plant seed of this kind if you can get it, choosing the most resistant hybrid that is suited to your locality. Corn breeders are fast developing hybrids that will yield well despite the borer.

Some of the inbreds known to transmit resistance to borer attack are Illinois R4, Illinois



Hy, Ohio 40B, Ohio 56, Iowa L317, and Wisconsin CC5.

Hybrids built of three resistant and one susceptible inbred are usually satisfactory. A hybrid with only two resistant lines is likely to be less satisfactory.

Known susceptible lines include Illinois A, Indiana WF9, Indiana Tr, Iowa Os420, U.S. 187-2, and U.S. 4-8. In infested areas hybrids composed of more than one of these inbreds should be planted sparingly.

Farmers who plant more than one hybrid in 1943 would do well to watch each carefully and compare borer reactions, thus obtaining a basis for 1944 selections.

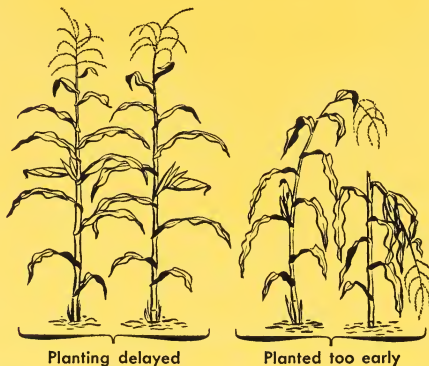
### 2. Delay planting

On fertile soil plant your corn at the latest date that will still permit the grain to mature. It will then stand a good chance of escaping the eggs of the first-brood moths, which are normally laid on the leaves of corn in May and June.

These first-brood borer moths fortunately are choosy. They want only the tallest, most vigorous corn for their egg-laying. That is why corn planted early on fertile soil invites infestation.

Second-brood borers hatch mostly in August. Infestation by this brood is not prevented by delayed planting. But in years when August is dry, these second-brood borers do not cause heavy damage.

On soils of low fertility there is no need to delay planting in order to prevent borer damage.



### 3. Practice clean farming

*Plow your fields clean*, burying all plant material deep enough so it will not be brought to the surface by later operations. Borers that work their way to the surface will die if they find no



stalks or weeds to crawl into. Fall plowing is preferred where erosion is not a problem.

*Get your neighbors to join with you.* Unless all infested fields over a large area are worked clean, the moths will fly from infested fields to clean fields.

*Other methods* besides clean plowing can be used but they are not so effective or economical. Low cutting of cornstalks, followed by ensiling or shredding, will kill borers that have burrowed into them. Trampling of stalks into the manure where they are being fed will do the same.

*Burning fields is of little value.* It sacrifices soil fertility and often kills only a few borers.

**THESE MEASURES ARE SIMPLE : THEY COST PRACTICALLY NOTHING : WHY NOT MAKE USE OF THEM?**

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# *How to* **KNOW THE CORN BORER**

Investigate broken stalks. If borers have caused the damage, their castings will often be found clinging to the stalk.

Look also for broken tassels and broken leaves and for holes in the stalk. If these have been caused by borers, there are likely to be grayish-white worms with brown heads in the adjacent tunnels.

During the egg-laying months (June-September), the eggs of the borer can be seen in small shiny clusters on the leaves of corn and large weeds.

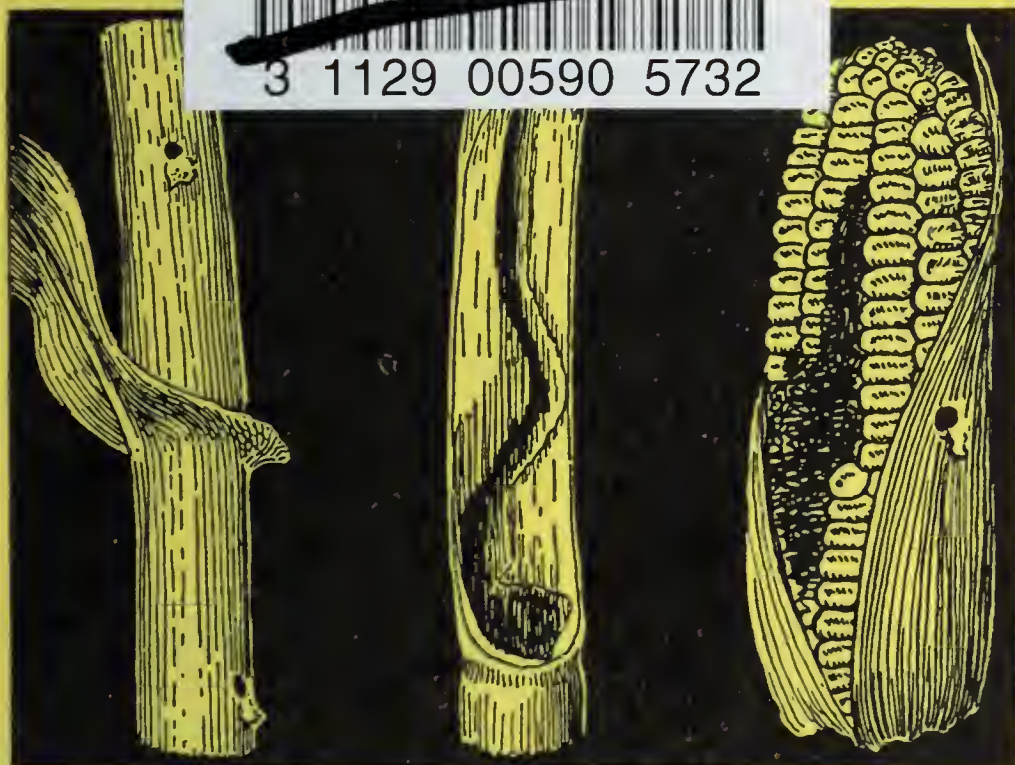
Several other insects look like the corn borer, but none of them bore into stalks of corn during the growing season.

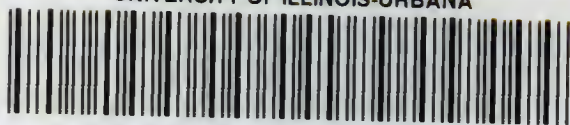
*See Circular 521 for further information about the borer and methods of combating it*

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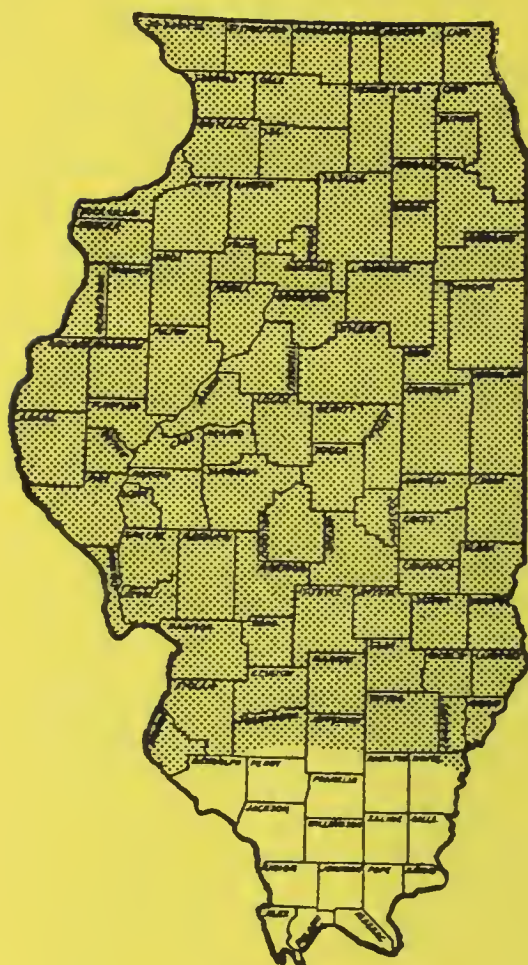




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*Where*

# CORN BORER HAS BEEN FOUND



Cornfields over almost the entire state showed 10 to 100 percent of the plants infested with borers in August, 1942, according to extensive surveys. The extreme southern counties had not yet been carefully scouted.

## WHAT THIS MEANS TO YOU

If your farm is located anywhere in Illinois except in the extreme southern part, and weather conditions are favorable to the borer, you will run the risk of serious commercial damage in 1943 unless you take steps to prevent it. Remember the country needs all the corn Illinois farmers can produce.

Weather is the main factor determining the amount of damage borers will do in any year. Several wet years in succession build up numbers. Dry years reduce them. A hot dry spring is especially unfavorable for this insect.

Cooperative Extension Work in Agriculture and Home Economics: University of Illinois, College of Agriculture, and the United States Department of Agriculture cooperating. H. P. Rusk, Director. Acts approved by Congress May 8 and June 30, 1914.

Urbana, Illinois

October, 1942

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